Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start		Rating **	Α	Issue No.		1	
LM End		Issue Type +	Ma	Location *		CR	
Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Operation		٥		0		
пеш	Manuals				٥		0
DWR ID	DWR_MA0	007_01_s _ 201	3_1				
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
There will be new O&M manuals when the levee is turned back over to the LMA after construction is complete. The O&M manuals are located at the Sutter Maintenance Yard.							

No Photos

Issue No. LM Start Rating ** Α Issue Type + Location * CR Ma LM End Earthen Levee GPS Latitude/Longitude Category Start End **Emergency Supplies &** Item Equipment DWR ID DWR MA0007 01 s 2013 3 Comment Code Inspector Comment Emergency supplies and equipment are stored at the Sutter Maintenance Yard.

No Photos

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ма	Location *		CR	
Category	Earthen L	evee		GPS La	atituc	le/Longitude	
Calegory				Start		End	
Item	Flood Pre	paredness &	aredness & Training				0
пеш					0		0
DWR ID	DWR_MA0	007_01_s _ 201	3_4				
		Comn	nent Cod	le			
		Inspecto	or Comm	ent			
Sutter Maintenance Yard employees attend the annual Flood Fight class put on by DWR inspector Bob Duffy.							

No Photos

LM Start	0.03	Rating **	М	Issue No.		42
LM End	1.72	Issue Type +	Ма	Location *		LS
Category Earthen Levee			GPS La	atitud	le/Longitude	
Category			Start		End	
Item	Erosion / Bank Caving			39.3112	97°	39.334365 °
пеш				-121.6374	90°	-121.633975 °
DWR ID	DWR_MA0	007_01_s _ 201	12_42			
		Comn	nent Cod	de		
E1 : Note a	or erosion site					
	Inspector Comment					

Erosion along landward levee slope due to agricultural ditch.

Photo 1 of 2: FA_2016_MA0007_200_42_20160906_00006.jpg



This photo was taken from the levee crown facing north looking at the erosion along the landward levee slope due to an agricultural ditch.

Spring 2014.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	0.03	Rating **	М	Issue No.		42 (cont)		
LM End	1.72	Issue Type +	Ма	Location *	ocation * LS			
Category Earthen Levee				GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Erosion / I	Bank Caving		39.3112	97°	39.334365 °		
пеш	-121.637490 ° -121.6339							
DWR ID DWR_MA0007_01_s _ 2012_42								
		Comn	nent Cod	le				
E1 : Note a	and monito	or erosion site						
			_					
		Inspecto	or Comm	ient				
Erosion along landward levee slope due to agricultural ditch.								



Agricultural ditch landside slope and toe.

LM Start	0.31	Rating **	N	Issue No.		69		
LM End	0.37	Issue Type +	Ма	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thi	n Trees		39.3149	91°	39.315693°		
пеш			-121.6350	38°	-121.634459°			
DWR ID DWR_MA0007_01_s _ 2016_69								
		Comn	nent Cod	de				
T5 : Tree s	stumps.							
		Inspecto	or Comm	nent				
Several tre	e stumps	at levee toe.						



View looking downstream of several tree stumps at the levee toe on the waterside.

Page 4 of 13

Flood Control Project Maintenance Levee Inspections

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	0.44	Rating **	U	Issue No.		72
LM End	0.44	Issue Type +	Ma	Location *		LS
Earthen Levee				GPS L	atitud	e/Longitude
Category				Start		End
Item	Trim / Thi	n Trees		39.3165	27°	39.316527°
item				-121.633800 °		-121.633800°
DWR ID	DWR_MA0	007_01_f _ 201	6_72			·
		Comn	nent Cod	de		
T5 : Tree s	stumps.					
Inspector Comment						
This stump is next to the canal on the landside and is decomposing and needs to be removed.						



View of a stump on the landside slope looking downstream. This stump is next to the canal on the landside and is decomposing and needs to be removed.

LM Start	0.56	Rating **	М	Issue No.		68
LM End	0.56	Issue Type +	Ма	Location *		LS
Earthen Levee				GPS La	atitud	le/Longitude
Category				Start		End
Item	Erosion / I	Bank Caving		39.3179	74°	39.317974°
пеш				-121.6325	42°	-121.632542 °
DWR ID	DWR_MA0	007_01_s _ 201	16_68			
		Comn	nent Cod	de		
E1 : Note a	and monito	or erosion site				
		Inspecto	or Comm	nent		
Eroding slope due to irrigation ditch on landside slope, looking downstream.						



View of eroding slope due to irrigation ditch on landside slope, looking downstream.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	0.92	Rating **	A/W	Issue No.		67		
LM End	0.92	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio		39.3231	18°	39.323118°			
пеш				-121.632205 ° -121.63220				
DWR ID	DWR_MA0	007_01_s _ 201	16_67					
		Comn	nent Cod	de				
V2 : Remo	ove the wild	d growth other	than na	tive grasse	s fro	m the levee		
		Inspecto	or Comm	nent				



View of landside toe vegetation looking downstream.

LM Start	1.00	Rating **	М	Issue No.		71	
LM End	1.12	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS La	atitud	le/Longitude		
Calegory				Start		End	
Item	Vegetatio	39.3241	72°	39.325938°			
пеш				-121.6317	92°	-121.631853°	
DWR ID DWR_MA0007_01_f _ 2016_71							
		Comn	nent Cod	de			
V1 : Contro easements		rass and wee	ds on th	e levee slo	pes	and	
		Inspecto	or Comm	nent			
Waterside annual grasses that need to be maintained.							
-							



View of waterside annual grasses that need to be maintained. Looking downstream.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	1.14	Rating **	Α	Issue No.		38			
LM End	10.68	Issue Type +	Ma	Location *		LS			
Earthen Levee			GPS La	atitud	e/Longitude				
Category				Start		End			
Item	Vegetatio	n		39.3261	77°	39.426842 °			
Rem				-121.631967 °		-121.642087 °			
DWR ID DWR_MA0007_01_f _ 2016_38									
		Comn	nent Cod	de					
V1 : Contro easements	_	rass and wee	eds on th	e levee slo	pes	and			
		Inspecto	or Comm	nent					
Maintained	d annual gr	asses.							



View looking downstream of maintained annual grasses.

LM Start	1.14	Rating **	Α	Issue No.	37		
LM End	10.68	Issue Type +	Ma	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Vegetatio		39.3261	77°	39.426843°		
пеш				-121.631968°		-121.642087°	
DWR ID DWR_MA0007_01_f _ 2016_37							
		Comn	nent Coo	le			
V1 : Contro easements		rass and wee	ds on th	e levee slo	pes	and	
		Inspecto	or Comm	ent			
Maintained	Maintained annual grasses.						



View looking downstream of maintained annual grasses.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	1.55	Rating **	М	Issue No.		2
LM End	1.71	Issue Type +	Ma	Location *		WS
Category			GPS Latitude/Longitude			
Calegory	y			Start		End
Item	2015 USACE Erosion Survey,			39.3320	00°	39.334240 °
item	DRAFT			-121.6331	78°	-121.633908°
DWR ID	DWR_MA0	007_01_s _ 201	16_2			
Comment Code						

Inspector Comment

2011 - The toe of the levee has been excavated by the land owner. Small holes throughout the site have been filled with a plaster like substance. Large canal on landside slope and over the levee toe. 2015: Site is part of the extended inventory, last inspected 2011. [2015] Site ID: FHR_47-5_R]

Photo 1 of 1 · FA	2016 MA0007	200 62	20160912	00120 ina

No Photos



View of levee that has been brought back to design elevation but still needs the aggregate base placed. Looking downstream.

LM Start	1.82	Rating **	A/W	Issue No.		62
LM End	2.53	Issue Type +	Ma	Location *		CR
Category	Earthen Levee			GPS La	tituc	le/Longitude
Calegory				Start		End
l+om		rface / Depres	ssions /	39.3357	74°	39.345322°
item	n Rutting			-121.6338	88°	-121.629603°
DWR ID DWR_MA0007_01_f _ 2016_62						
		_	. ^			

Comment Code

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

This section of levee has been brought back to design elevation but still needs the aggregate base placed.

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	2.53	Rating **	A/W	Issue No.	61		
LM End	3.33	Issue Type +	Ma	Location *	CR		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item		rface / Depres	ssions /	39.3453	322°	39.354627°	
пеш	Rutting			-121.629604° -121.63553			
DWR ID	DWR_MA0	007_01_f _ 201	6_61			·	
		Comn	nent Cod	de			
C2 : Repai	r depressi	ons or ruts in	the crow	n or slope.			
		Inspecto	or Comm	nent			
	This section of levee is currently under construction and has been degraded and is being brought back to design elevation.						

09/07/2016

Photo 1 of 1: FA_2016_MA0007_200_61_20160912_00119.jpg

View of the levee that is currently under construction and has been degraded and is being brought back to design elevation, looking downstream

Rating ** Issue No. С 2.82 65 LM Start Issue Type + Location * WS LM End 2.82 Ma Earthen Levee GPS Latitude/Longitude Category Start End Slope Stability 39.349309° 39.349309° -121.630374° -121.630374 DWR ID DWR_MA0007_01_s _ 2016_65 Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

The slope has been corrected with the new construction and photo removed.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	3.32	Rating **	A/W	Issue No.		60	
LM End	4.29	Issue Type +	Ma	Location *	CR		
Category	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item		rface / Depres	ssions /	39.3545	96°	39.365418°	
пеш	Rutting			-121.6354	04°	-121.646539°	
DWR ID DWR_MA0007_01_f _ 2016_60						·	
		Comn	nent Coc	le			

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

This section of levee has been brought back to design elevation but still needs the aggregate base placed.



View of levee that has been brought back to design elevation but still needs the aggregate base placed. Looking down stream.

LM Start	4.16	Rating **	С	Issue No.		63		
LM End	4.16	Issue Type +	Ма	Location *		WS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Category			Start		End			
Item	Slope Sta	bility		39.363852°		39.363852°		
пеш				-121.6451	49°	-121.645149°		
DWR ID DWR_MA0007_01_s _ 2016_63								
	Comment Code							

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

The slope has been corrected with the new construction.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	4.39	Rating **	М	Issue No.	6		
LM End	4.46	Issue Type +	Ma	Location *		WS	
Supplemental				GPS La	tituc	le/Longitude	
Calegory	negory					End	
Item	2015 USACE Erosion Survey,			39.36672	26°	39.367606°	
пеш	DRAFT			-121.6472	17°	-121.647866 °	
DWR ID	DWR_MA0	007_01_s _ 201	16_6				
Comment Code							

Inspector Comment

2012 - Oversteepened slope with failing rock (from repair completed in 1954). Likely slope stability issues. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: FHR_50-9_R]

No Photos

LM Start	7.00	Rating **	A/W	Issue No.		54	
LM End	7.90	Issue Type +	Ma	Location *	CR		
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item		rface / Depres	ssions /	39.3922	05°	39.401297°	
пеш	Rutting			-121.6278	99°	-121.630883 °	
DWR ID DWR_MA0007_01_f _ 2016_54							
	Comment Code						

C2: Repair depressions or ruts in the crown or slope.

Inspector Comment

This portion of the levee is currently under construction and has been degraded and is being brought back to design elevation.

Photo 1 of 1: FA 2016 MA0007 200 54 20160912 00114.jpg



View of this portion of the levee that is currently under construction that has been degraded and is being brought back to design elevation.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	7.54	Rating **	С	Issue No.	59	
LM End	7.54	Issue Type +	Ma	Location *		LS
Category	evee		GPS La	tituc	le/Longitude	
Calegory	Start End					End
Item	Slope Sta	bility		39.396185°		39.396185°
пеш				-121.6298	57 °	-121.629857°
DWR ID	DWR_MA0	007_01_s _ 201	16_59			
Comment Code						
S3 : Repai	r the levee	slope damag	ed by ve	ehicle traffic	and	d prevent

access where possible.

Inspector Comment

Slope Stability has been corrected with the new construction.

No Photos

No Photos

LM Start	7.59	Rating **	С	Issue No.		58
LM End	7.59	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS Latitude/Longitude		
				Start		End
Item	Slope Sta	bility		39.3967	68°	39.396768°
ILEIII				-121.6300	39°	-121.630039°
DWR ID	DWR_MA0	007_01_s _ 201	6_58			·

Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

Slope Stability has been corrected with the new construction.

LM Start	7.65	Rating **	С	Issue No.		57	
LM End	7.65	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Slope Sta	bility		39.3977	06°	39.397706	0
Item				-121.6303	37°	-121.630337	0
DWR ID	DWR_MA0	007_01_s _ 201	6_57				

Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

Slope Stability has been corrected with the new construction.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	9.06	Rating **	A/W	Issue No.		47
LM End	10.53	Issue Type +	Ma	Location *		CR
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory			Start		End	
Item		rface / Depres	ssions /	39.4112	63 °	39.426682°
item	Rutting			-121.6347	30°	-121.639426°
DWR ID	DWR_MA0	007_01_s _ 201	16_47			
Comment Code						
C3 : Add a	C3 : Add appropriate gravel or road base. Grade and compact.					

Inspector Comment

This portion of the levee is currently under construction and has been degraded and is being brought back to design elevation.



View of the portion of levee that is currently under construction that has been degraded and is being brought back to design elevation.

LM Start	9.16	Rating **	С	Issue No.	56		
LM End	9.16	Issue Type +	Ma	Location *	CR		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End		
Item	Crown Surface / Depressions / Rutting			39.4127	07°	39.412707°	
пеш				-121.6346	51 °	-121.634651 °	
DWR ID	DWR_MA0007_01_s _ 2016_56						
Comment Code							
C3 : Add appropriate gravel or road base. Grade and compact.							

Inspector Comment

This portion of the levee crown has been brought back to the design elevation during the construction phase.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

** SBFCA currently has operation and maintenance obligations during project construction and closeout.

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	09/07/2016 09/08/2016	Sterling York

LM Start	9.67	Rating **	С	Issue No.	53		
LM End	9.67	Issue Type +	Ma	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Slope Stability			39.41659	94°	39.416594	0
				-121.63475	58°	-121.634758	0
DWR ID	DWR_MA0007_01_s _ 2016_53						
		Comn	nent Cod	de			
S3 : Repai access wh		slope damaç le.	ged by ve	ehicle traffic	and	d prevent	
		Inspecto	or Comm	nent			

The slope has been corrected with the new construction.

No Photos

LM Start 11.15 Rating ** С Issue No. 46 Issue Type + Location * CR 11.15 Ma LM End Earthen Levee GPS Latitude/Longitude Category Crown Surface / Depressions / 39.432582° 39.432582° Item Rutting

DWR ID DWR MA0007 01 s 2016 46

Comment Code

-121.645546°

-121.645546 °

C1: Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

This portion of the levee crown has been brought back to the design elevation during the construction phase, and the old photo has been removed.

No Photos

* Location LS: Land Side WS: Water Side

N/A: Not Applicable

A: Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement